Amendments to the Claims:

Please amend the claims to read as follows:

- 1-3. (Cancelled)
- 4. (Currently amended) The method of claim 10 wherein the step of co-incubation of the amyloid protein with sulfated macromolecules heparan sulfate is in distilled water or Tris-buffered saline (pH 7.0-7.4).
- 5. (Cancelled)
- 6. (Currently amended) The method of claim 10 wherein <u>athe</u> molar ratio of beta-amyloid protein to <u>sulfated macromoleculeheparan sulfate</u> is within a range of 1:0.5 to 1:100.
- 7. (Currently amended) The method of claim 6 wherein the molar ratio of beta-amyloid protein to sulfated macromolecule heparan sulfate is about 1:5.
- 8. (Currently amended) The method of claim 10 wherein <u>athe</u> weight ratio of beta-amyloid protein to <u>sulfated macromolecule</u>heparan sulfate is within a range of 1:0.4 to 1:100.
- 9. (Currently amended) The method of claim 8 wherein the sulfated macromolecule is heparan sulfate and the weight ratio of beta-amyloid protein to heparan sulfate is about 1:8 or 1:16.
- 10. (Currently amended) A method for the formation of particular amyloid plaques, the method comprising *in vitro* co-incubation of beta-amyloid protein 1-40 (SEQ ID NO: 1) with a sulfated macromolecule for at least 3-7 days at 30-45°C, wherein the sulfated macromolecule is selected from the group consisting of with heparan sulfate, polyvinyl sulfonate and perlecan, but excluding EHS perlecan heparan sulfate, whereby spherical or compact shaped amyloid plaques are formed that demonstrate a Maltese-cross pattern when stained with Congo red and viewed under polarized light, and an amyloid star appearance when viewed by transmission electron microscopy.

- 11-13. (Cancelled)
- 14. (Original) The method of claim 10 wherein the step of co-incubation has a duration of about 7 days.
- 15. (Currently amended) The method of claim 10 wherein the step of co-incubation of the beta-amyloid protein with sulfated macromoleculesheparan sulfate occurs at about 37°C.
- 16-17. (Cancelled)
- 18. (Cancelled)